

# ABSTRACT OF THE DISCLOSURE

The invention relates to a method for preparing monodispersed biodegradable microspheres consisting in a) preparing an emulsion containing at least one polymeric phase and at least one aqueous phase at a viscosity ratio between the dispersed polymeric phase and the aqueous phase ranging from 0.12 to 10, b) exposing the thus obtained emulsion to a controlled laminar shear strength, c) removing a solvent from the polymeric phase and in d) isolating the thus obtained microspheres. The use of the prepared microspheres is also disclosed.